EXHIBIT E

SOCIAL ECONOMICS

Market Behavior in a Social Environment

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Five decades after this process started, family structures have changed remarkably. No longer is marriage considered inviolable, but rather divorce is expected with a reasonable likelihood. Alternative and conflicting lifestyles are increasingly viewed as equally "natural" and attractive, including not only stable heterosexual first marriages with children, but also second and third marriages of divorced persons, single parents, homosexual marriages, and group living. These changes in family-sexual patterns have picked up so much momentum that the long-run changes constitute a revolution in family mores and attitudes.

The social multiplier creates a cascading effect as members of a social group influence and reinforce one another's behavior. The informational cascades literature shows how early choices influence later choices because earlier choices reveal private information (see Bikhchandani, Hirshleifer, and Welch, 1992, p. 996). This cascade in sequential behavior is a special case of more general cascading due to social interactions and complementarity.

Social interactions make the social multiplier positive, but its precise value depends on the nature of the interaction and the degree of complementarity. The social multiplier, and the likelihood of a large response to a common change, increases as the influence of a group over its members rises.

For example, if each individual's demands are related to social capital in rigidly fixed proportions, then $x^j = w^j NS$, so that $m = (1/N)\Sigma(\partial x^j/\partial S) = 1$, where $\Sigma w^j = 1$. In this fixed-proportions case, the aggregate demand for x is indeterminate because of the overriding influence of peers on behavior. Demand by any member totally depends on the demands by other members of the same social group. Driving on the right- or left-hand side of the road is a good example. Driving on either side by everyone constitutes equally good equilibria, since if everyone else drives on the same side—either side will do—each person strongly wants to drive on that same side. Other examples include units of measure, such as the metrics system, and network standards, such as for VCRs and computing operating systems.

Fixed proportions imply that $m = 1$ because the demand for x by each j changes by the same percentage as S does. This is a very strong form of social interaction, but it is not the strongest form possible. The social multiplier could be above one because demand by a typical member could increase by a greater percentage than aggregate demand (see Chapter 9 for a discussion that uses $m > 1$ to understand fads).

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